HINZ
A Rockwell Automation Company

EnCana
Resthaven SCADA System

The Client:

With an enterprise value of approximately $US45 billion, EnCana is one of North America's leading natural gas producers, holding one of the largest portfolios of gas and oil resource lands onshore in North America, and is a technical and cost leader in the in-situ recovery of oil sands bitumen.

The Requirement:

There were a number of operations associated with the Resthaven site that required upgrades to monitoring as well as the addition of new equipment:

- Existing field measurement sites using SCADAPack32 RTUs
- Existing compressor station and plant measurement
- New compressor station and plant measurement

All monitoring was to be done from a single central SCADA system located in the plant area. This was a multi-phase project that required installing the SCADA system first, in order to monitor all existing well sites and plant equipment. The second phase required additions to the SCADA system to accommodate the new compressor facility in the plant area as well as additional measurement.

It was important that no measurement data was lost in any of the installation phases so production could be maintained. It was also necessary to establish new standards for all RTU database and displays in order to have a more efficient mechanism for adding new well sites to the system.

In order to meet the needs of EnCana Calgary, all data obtained by the SCADA system was to be sent to an Electronic Flow Measurement system so that EUB Directive 17 compliance could be achieved. This required the SCADA system to poll data and event information from all measurement devices daily and send it to the EFM system for auditing. Real-time data was also transferred to a data historian for long term storage and additional offline analysis. All data from both the EFM and the Data Historian systems were transferred to the EnCana Production Volume Reporting (PVR) system for use by production accounting.

The Design Solution:

CygNet SCADA system software as well as FlowCal Electronic Flow Measurement system software was chosen as the main system software. The PI data historian was an existing product that EnCana was using in other installations. Hinz designed the database, displays and reports and was responsible for the testing, installation and commissioning of the complete system onsite. In addition, Hinz enhanced the interface to FlowCal to include some of EnCana-specific tracking information. Hinz implemented a flat file interface report that allowed SCADA information to be manually imported directly into the PVR system in the event the communications link between the Resthaven site and Calgary was down for a lengthy period of time. Hinz also implemented the CygNet WEB interface that allowed EnCana personnel to view real time and historical data from anywhere on the corporate network using Internet Explorer.

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EnCana Natural Gas Storage Facility, Suffield Alberta

System Specifications:

- DELL Power Edge Redundant SCADA Servers
- DELL Power Edge EFM Server
- DELL Power Edge WEB Server
- HP PI Data Historian Interface PC
- LTO Tape Backup on all Servers
- DELL Precision Workstation Operator/ Engineering Stations
- Black & White and Color Laser Printers
- SCADAPack Plant and Field RTUs for measurement
- PLC5 and Control Logix PLCs for Compressor Stations
- APC UPS Power Protection
- DELL KVM Switch
- Cisco Network Equipment
- Systech Terminal Server Communication Interfaces
- CygNet ETM 6.52 SCADA Software
- Win2k3 Server and Windows XP Professional
- Database 15k points
- Custom Template type Displays
- SCADAPack Modbus and RSLinx Protocol Interfaces
- Custom Reports
- WEB Interface
- EFM Interface
- Enhanced EFM Interface for additional EnCana data
- Data Historian Interface
- CygNet GNS Callout System using the Intel Dialogics Card
- PI Data Historian
- FlowCal Electronic Flow Measurement System (EFM)

For further information or to contact a Hinz office near you, please check our website at:

www.hinz.com